

IN THE CLAIMS:

1. (Currently Amended) A heating system for a vehicle, the heating system comprising:  
a heating air blower for generating a heating air stream to be introduced into the interior space of the vehicle;

a heater comprising a heating burner supplied with fuel and combustion air for burning a fuel/air-mixture and generating heat; [[with]]

a heat exchanger arrangement for transferring said heat to heating the heating air stream being delivered by said heating air blower;

a heating air stream temperature sensor arrangement for generating an output linked with the temperature at which the heating air stream heated by said heater is discharged;

a mixing arrangement for setting an outside air/ambient air ratio of the air to be fed to said heat exchanger arrangement;

an outside temperature sensor arrangement for generating an output linked with an outside temperature; and

a control arrangement for controlling said mixing arrangement to set an outside air/ambient air ratio on the basis of an output of said outside temperature sensor arrangement and to set the heat output of said heater on the basis of the output of said heating air stream temperature sensor arrangement.

2. (Original) A heating system in accordance with claim 1, wherein said control device controls said mixing arrangement such that the outside air/ambient air ratio is lower in case of

a lower outside temperature.

3. (Currently Amended) A heating system for a vehicle, the heating system comprising:

a heating air blower for generating a heating air stream to be introduced into the interior space of a vehicle;

a heating air stream temperature sensor arrangement for generating an output linked with the temperature at which the heating air stream heated by said heater is discharged;

a heater comprising a heating burner supplied with fuel and combustion air for burning a fuel/air-mixture and generating heat; [[with]]

a heat exchanger arrangement for transferring said heat to heating the heating air stream being delivered by said heating air blower;

a mixing arrangement for setting an outside air/ambient air ratio of the air to be fed into said heat exchanger arrangement;

a vehicle interior space temperature sensor arrangement for generating an output linked with the temperature of the interior space of the vehicle; and

a control arrangement for controlling said mixing arrangement for setting the outside air/ambient air ratio on the basis of the output of said vehicle interior space temperature sensor arrangement and to set the heat output of said heater on the basis of the output of said heating air stream temperature sensor arrangement.

4. (Original) A heating system in accordance with claim 3, wherein said controlling

arrangement controls said mixing arrangement such that the outside air/ambient air ratio is lower in case of a lower temperature of the interior space of the vehicle.

5. (Currently Amended) A heating system for a vehicle, the heating system comprising:

a heating air blower for generating a heating air stream to be introduced into the interior space of a vehicle;

a heater comprising a heating burner supplied with fuel and combustion air for burning a fuel/air-mixture and generating heat; [[with]]

a heat exchanger arrangement for transferring said heat to heating the heating air stream being delivered by said heating air blower;

a heating air stream temperature sensor arrangement for generating an output linked with the temperature at which the heating air stream heated by said heater is discharged;

a mixing arrangement for setting an outside air/ambient air ratio of the air to be fed into said heat exchanger arrangement;

a vehicle interior space temperature sensor arrangement for generating an output linked with the temperature of the interior space of the vehicle;

a vehicle interior space desired temperature presetting arrangement; and

a control device for controlling said mixing arrangement for setting the outside air/ambient air ratio on the basis of a deviation of the temperature of the interior space of the vehicle from the interior space desired temperature and to set the heat output of said heater on the basis of the output of said heating air stream temperature sensor arrangement.

6. (Previously Presented) A heating system in accordance with claim 1, further comprising:

a vehicle interior space desired temperature presetting arrangement; and

a vehicle interior space temperature sensor arrangement , wherein said controlling arrangement is designed to set the delivery capacity of said heating air blower on the basis of an output of said vehicle interior space temperature sensor arrangement and the interior space desired temperature preset by said vehicle interior space desired temperature presetting arrangement.

7. (Original) A heating system in accordance with claim 1, wherein said controlling arrangement comprises a first control device for controlling said heating air blower and said mixing arrangement as well as a second control device for controlling said heater, wherein said first control device has the output of said outside temperature sensor arrangement and/or of a vehicle interior space temperature sensor arrangement and/or of a vehicle interior space desired temperature presetting arrangement as the input variables.

8. (Previously Presented) A heating system in accordance with claim 3, further comprising:

a vehicle interior space desired temperature presetting arrangement, wherein said controlling arrangement is designed to set the delivery capacity of said heating air blower on

5 the basis of an output of said vehicle interior space temperature sensor arrangement and the interior space desired temperature preset by said vehicle interior space desired temperature presetting arrangement.

9. (Original) A heating system in accordance with claim 3, wherein said controlling arrangement comprises a first control device for controlling said heating air blower and said mixing arrangement as well as a second control device for controlling said heater, wherein said first control device has the output of an outside temperature sensor arrangement and/or of said  
5 vehicle interior space temperature sensor arrangement and/or of a vehicle interior space desired temperature presetting arrangement as the input variables.

10. (Previously Presented) A heating system in accordance with claim 5, wherein said controlling arrangement is designed to set the delivery capacity of said heating air blower on the basis of an output of said vehicle interior space temperature sensor arrangement and the interior space desired temperature preset by said vehicle interior space desired temperature  
5 presetting arrangement.

11. (Original) A heating system in accordance with claim 5, wherein said controlling arrangement comprises a first control device for controlling said heating air blower and said mixing arrangement as well as a second control device for controlling said heater, wherein said first control device has the output of an outside temperature sensor arrangement and/or of said

5 vehicle interior space temperature sensor arrangement and/or of said vehicle interior space  
desired temperature presetting arrangement as the input variables.

12. (New) A heating system for a vehicle, the heating system comprising:

a heating air blower for generating a heating air stream to be introduced into the interior  
space of the vehicle;

10 a heater comprising a heating burner supplied with fuel and combustion air for burning  
a fuel/air-mixture and generating heat;

a heat exchanger arrangement for transferring said heat to the heating air stream being  
delivered by said heating air blower;

15 a heating air stream temperature sensor arrangement for generating an output linked  
with the temperature at which the heating air stream heated by said heater is discharged;

a mixing arrangement for setting an outside air/ambient air ratio of the air to be fed to  
said heat exchanger arrangement;

an outside temperature sensor arrangement for generating an output linked with an  
outside temperature; and

20 a control arrangement for carrying out a parking heating operation control by  
controlling said mixing arrangement to set an outside air/ambient air ratio on the basis of an  
output of said outside temperature sensor arrangement and controlling said heater to set the  
heat output of said heater on the basis of the output of said heating air stream temperature  
sensor arrangement and of a fixedly set desired temperature of said heating air stream.

13. (New) A heating system in accordance with claim 12, wherein said control device controls said mixing arrangement such that the outside air/ambient air ratio is lower in case of a lower outside temperature.

14. (New) A heating system for a vehicle, the heating system comprising:

a heating air blower for generating a heating air stream to be introduced into the interior space of a vehicle;

a heating air stream temperature sensor arrangement for generating an output linked with the temperature at which the heating air stream heated by said heater is discharged;

a heater comprising a heating burner supplied with fuel and combustion air for burning a fuel/air-mixture and generating heat;

a heat exchanger arrangement for transferring said heat to the heating air stream being delivered by said heating air blower;

a mixing arrangement for setting an outside air/ambient air ratio of the air to be fed into said heat exchanger arrangement;

a vehicle interior space temperature sensor arrangement for generating an output linked with the temperature of the interior space of the vehicle; and

a control arrangement for carrying out a parking heating operation control by controlling said mixing arrangement for setting the outside air/ambient air ratio on the basis of the output of said vehicle interior space temperature sensor arrangement and controlling said

heater to set the heat output thereof on the basis of the output of said heating air stream temperature sensor arrangement and of a fixedly set desired temperature of said heating air stream.

15. (New) A heating system in accordance with claim 14, wherein said controlling arrangement controls said mixing arrangement such that the outside air/ambient air ratio is lower in case of a lower temperature of the interior space of the vehicle.

16. (New) A heating system for a vehicle, the heating system comprising:

a heating air blower for generating a heating air stream to be introduced into the interior space of a vehicle;

a heater comprising a heating burner supplied with fuel and combustion air for burning  
5 a fuel/air-mixture and generating heat;

a heat exchanger arrangement for transferring said heat to the heating air stream being delivered by said heating air blower;

a heating air stream temperature sensor arrangement for generating an output linked with the temperature at which the heating air stream heated by said heater is discharged;

10 a mixing arrangement for setting an outside air/ambient air ratio of the air to be fed into said heat exchanger arrangement;

a vehicle interior space temperature sensor arrangement for generating an output linked with the temperature of the interior space of the vehicle;



a vehicle interior space desired temperature presetting arrangement; and

15 a control device for carrying out a parking heating operation control by controlling said mixing arrangement for setting the outside air/ambient air ratio on the basis of a deviation of the temperature of the interior space of the vehicle from the interior space desired temperature and controlling said heater to set the heat output thereof on the basis of the output of said heating air stream temperature sensor arrangement and of a fixedly set desired temperature of  
20 said heating air stream.

17. (New) A heating system in accordance with claim 12, further comprising:

a vehicle interior space desired temperature presetting arrangement; and

a vehicle interior space temperature sensor arrangement, wherein said controlling arrangement is designed to set the delivery capacity of said heating air blower on the basis of  
5 an output of said vehicle interior space temperature sensor arrangement and the interior space desired temperature preset by said vehicle interior space desired temperature presetting arrangement.

18. (New) A heating system in accordance with claim 12, wherein said controlling arrangement comprises a first control device for controlling said heating air blower and said mixing arrangement as well as a second control device for controlling said heater, wherein said  
5 first control device has the output of said outside temperature sensor arrangement and/or of a vehicle interior space temperature sensor arrangement and/or of a vehicle interior space desired

temperature presetting arrangement as the input variables.

19. (New) A heating system in accordance with claim 14, further comprising:

a vehicle interior space desired temperature presetting arrangement, wherein said controlling arrangement is designed to set the delivery capacity of said heating air blower on the basis of an output of said vehicle interior space temperature sensor arrangement and the interior space desired temperature preset by said vehicle interior space desired temperature  
5 presetting arrangement.

20. (New) A heating system in accordance with claim 14, wherein said controlling arrangement comprises a first control device for controlling said heating air blower and said mixing arrangement as well as a second control device for controlling said heater, wherein said first control device has the output of an outside temperature sensor arrangement and/or of said  
5 vehicle interior space temperature sensor arrangement and/or of a vehicle interior space desired temperature presetting arrangement as the input variables.

21. (New) A heating system in accordance with claim 16, wherein said controlling arrangement is designed to set the delivery capacity of said heating air blower on the basis of an output of said vehicle interior space temperature sensor arrangement and the interior space desired temperature preset by said vehicle interior space desired temperature presetting  
5 arrangement.

22. (New) A heating system in accordance with claim 16, wherein said controlling arrangement comprises a first control device for controlling said heating air blower and said mixing arrangement as well as a second control device for controlling said heater, wherein said first control device has the output of an outside temperature sensor arrangement and/or of said vehicle interior space temperature sensor arrangement and/or of said vehicle interior space desired temperature presetting arrangement as the input variables.

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